STUDIES ON THE MARYLAND FLORA IX: CAKILE MARITIMA SCOP. NATURALIZED IN THE CHESAPEAKE BAY REGION

Richard E. Riefner, Jr. 20832 Skinner Lane Huntington Beach, California 92646

Cakile maritima Scop. is a fleshy, spreading annual native to the coasts of Europe (Tutin et al., 1964). According to herbarium records, this species has been known from eastern North America as a ballast plant as early as 1877 from Philadelphia, Martindale s.n. (NY, US). The plant has since been collected as an occasional adventive on maritime garbage from numerous Atlantic seaports (Gleason and Cronquist, 1963; Small, 1972). Most records of this species represent short-lived populations of ballast heaps, with the exception of more recent collections from California where it is naturalized on the coastal strand (Munz, 1974).

Recently I have found this plant growing in large, well established colonies on beaches, and along marsh at high tide limit on the Chesapeake Bay in Anne Arundel and Queen Anne's Counties. Apparently pods of the species have been carried by tide from the Port of Baltimore, perhaps where it was introduced with ballast in past decades. Cakile maritima was not included in the treatment of Anne Arundel County flora by Stieber (1971), or in treatments of the vascular flora of the Chesapeake Bay region by Krauss et al. (1971), Sipple (1978) or Wass (1972). Although not appearing to be spreading rapidly in this region, additional populations of C. maritima are likely to grow in other counties along the extensive shoreline of the Bay. Cakile maritima should be considered a permanent element of the Maryland flora. The species occupies much the same niche of the coastal strand as C. edentula, but is not easily confused with it. Deeply pinnatifid leaves and pods having two triangular protuberances at the lower joint clearly separate it from the common sea rocket, C. edentula.

Collection data-ANNE ARUNDEL CO.: Sandy beach N of Pine Hurst, 8-10-58, <u>Baltars 2199</u> (US); same locality, 6-15-81, <u>Riefner 81-152</u>(MARY); beaches, marsh and jetty rock crevices, at Sandy Point State Park, 6-2-80, <u>Riefner 80-88</u>(MARY). QUEEN ANNE'S CO.: Beaches at Matapeake State Park, 9-20-80, <u>Riefner 80-390</u>(MARY).

LITERATURE CITED

Gleason, H.A. and A. Cronquist. 1963. Manual of the vascular plants of northeastern United States and adjacent Canada. Van Nostrand Reinhold Co., New York.

- Krauss, R.W., R.G. Brown, R.D. Rappleye, A.B. Owens, C. Shearer, E. Hsiao and J.L. Reveal. 1971. Checklist of plant species of the Chesapeake Bay occuring within the hightide limits of the Bay and its tributaries. Univ. of Maryland at College Park, Tech. Bull. 2002: 1-33.
- Munz, P.A. 1974. A flora of southern California. University of California Press.
- Sipple, W.S. 1978. An atlas of vascular plant species distribution maps for tidewater Maryland. Wetland Publication No. 1. Wetland Permit Section, Water Resources Adm., Dept. of Natural Resources, Annap., MD.
- Small, J.K. 1972. Manual of the southeastern flora, Part one. Hafner Publishing Co., New York.
- Stieber, M.T. 1971. The vascular flora of Anne Arundel County, MD. An annotated checklist. Castanea 36:263-312.
- Tutin, T.G., V.H. Heywood, N.A. Burges, D.H. Valentine, S.M. Walters and D.A. Webb. 1964. Flora Europaea. Cambridge University Press.
- Wass, M.L. (ed.). 1972. A check-list of the biota of lower Chesapeake Bay with inclusions from the upper bay and the Virginia Sea. Virginia Inst. Marine Sci. Spec. Rept. 65:1-290.